

Spinoff

NASA Technology Helps Navy

NASA scientists have turned over to the US Navy the first phase of a data analysis program designed to find unexploded ordnance and mines in bays and harbors that were once used as gunnery ranges and test areas. Space program technology and computer applications are being adapted by Jet Propulsion Laboratory (JPL) to help identify underwater mines and ordnance in data from existing Navy sonar, laser, and magnetic instruments.

"The purpose of the program, called Mobile Underwater Debris Survey System, or MUDSS, is to demonstrate various technologies that can be used to survey former defense sites for unexploded waste," said Dr. Robert Somoano, MUDSS program manager at JPL. According to Somoano, some of the explosive debris in various bays and harbors has been in place since long before World War II.

Half way through the three-year effort, MUDSS is being conducted by JPL, under contract to the Department of Defense, with funding provided by the department's Strategic Environmental Research and Development Program. The work is being done in partner-

ship with the Naval Coastal System Station, Naval Surface Warfare Center in Florida. Once the Navy finds the debris, the problem is turned over to the US Army, which has the responsibility for disposing of all unexploded military waste. The Army has its own program underway to clean up land bases.

JPL is also providing a chemical detector that will sniff out small traces of explosives in the water. The instruments are towed beneath the surface of the water on cables strung from a catamaran. To date, researchers have made about 150 runs over the targets with various combinations of sensors functioning.

Somoano explained that potential users of these systems include the Army Environmental Center, the Army Corps of Engineers, and the Navy Explosive Ordnance Disposal Technology Division. There also are potential commercial users, including underwater survey and cleanup, de-mining, archeology site survey, and law enforcement search operations.

Excerpted from NASA press release 96-131.



NASA's wealth of technology is being re-used in the fields of medicine, industry, and education and by the military to develop products and processes that benefit many sectors of our society. Spinoff applications from NASA's research and development programs are our dividends on the national investment in aerospace.

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NASA Technologies Enter Space Hall of Fame

Three technologies originally developed by NASA to improve pilot and astronaut safety were inducted into the US Space Foundation's "Space Technology Hall of Fame" on April 11 of this year to honor their contribution to enhancing the quality of life on Earth. The technologies being recognized are those for anti-shock trousers, flame retardant seat materials, and the radiation barrier.

Ames Research Center's Director, Harry McDonald said of the honored technologies,.

"They provide direct, quantifiable, and invaluable benefits to the American tax-payer and the domestic economy."

With these latest selections, 25 technologies have been inducted into the Hall since the awards began in 1988.

Excerpted from NASA press release 96-69, written by David Morse, ARC.